

Report

Crater Lake National Park

■ 1.0 Site Description

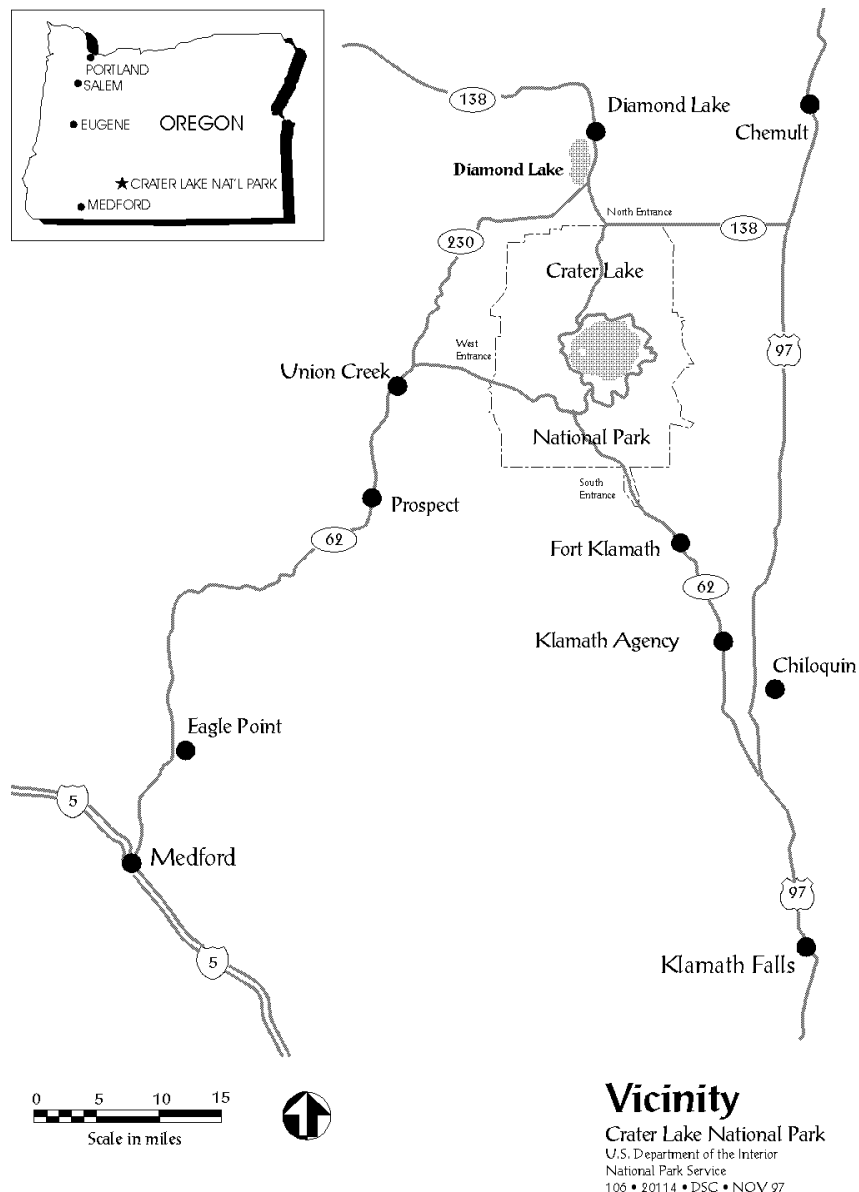
Crater Lake National Park (CLNP) was created in 1902 to protect the natural and cultural resources in the area surrounding Crater Lake. The lake was formed after the collapse of an ancient volcano, posthumously named Mount Mazama, in a violent eruption over 7,700 years ago. That eruption was estimated to be over 42 times more powerful than the 1980 eruption of Mount St. Helens. The basin, or caldera, of Crater Lake formed after the top 5,000 feet of the volcano collapsed. Subsequent lava flows sealed the bottom, allowing the caldera to fill with approximately 4.6 trillion gallons of water from rainfall and snow melt to create the deepest lake in the United States. Crater Lake is 4.5 to 6.0 miles across, has 20 miles of shoreline, and a surface area of 21.5 square miles.

CLNP is located in southern Oregon on the crest of the Cascade Range, 150 miles from the Pacific Coast. The Park is about 80 miles northeast of Medford, Oregon, and 60 miles north of Klamath Falls, Oregon (see Figure 1). Over 90 percent of its 183,000 acres are managed as wilderness.

CLNP receives about 90 percent of its annual visitation between May and October; 50 percent of annual visitation occurs in July and August. Over the past several years, park attendance has averaged about 520,000 visits, including 68,000 overnight stays. Both of these attendance figures are below historical highs that were reached during the 1980s. Visitation is low from November through April due to heavy snowfall that averages over 500 inches per year.

Visitor activities vary by the season. During summer, a popular visitor excursion is Rim Drive, a 33-mile two-way loop around the lake. Rim Drive has over 20 scenic overlooks that provide opportunities to view the lake. It also provides access and circulation between the visitor attraction areas at Rim Village and Cleetwood (see Figure 2). Other popular activities during the summer months include bicycling, hiking, camping, a Junior Ranger program, a boat tour on Crater Lake, and nighttime interpretive programs at the campground. Over 50 miles of one way and loop hiking trails are available in CLNP.

Winter activities include cross-country skiing, snow shoeing, and viewing of the lake at Rim Village. Rim Drive as well as park access roads to the north are closed during the winter season, which generally lasts between November and April.

Figure 1. Location Map for Crater Lake National Park

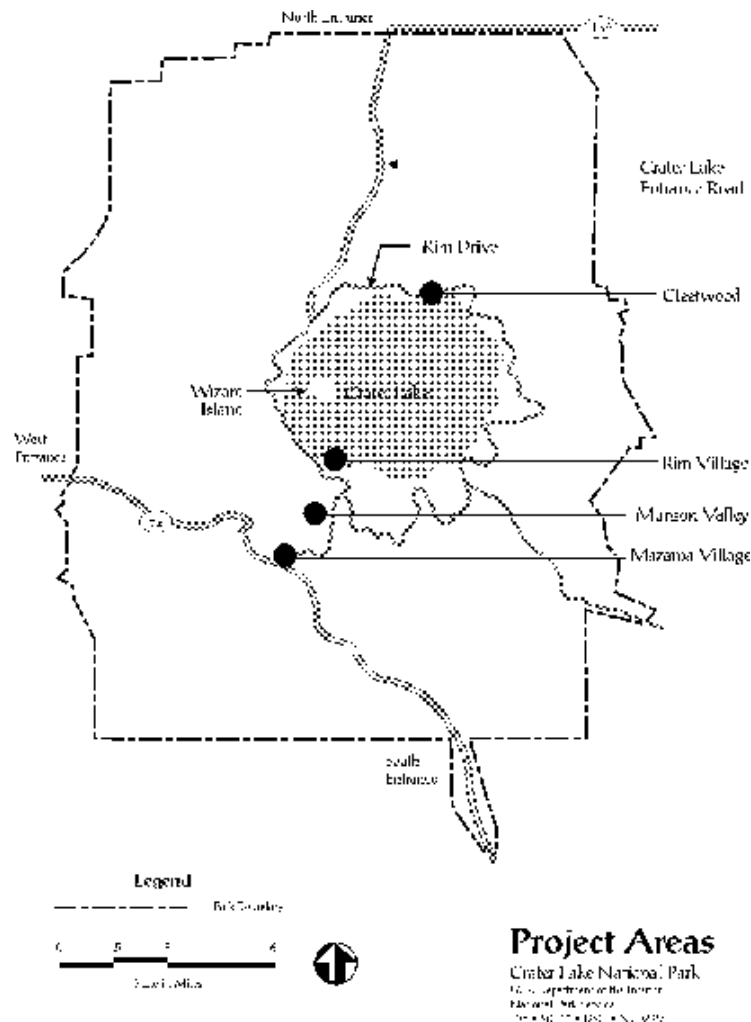
A visitor profile survey from the late 1980s indicated that about 80 percent of visitors arrived in groups of two to four people. During the summer peak, about 5,000 people per day visited CLNP, with visitation relatively even throughout the week. During the winter peak, about 600 people per day visited; over half of visits occurred on the weekend. About two-thirds of the visitors arrive between the hours of 10:00 a.m. and 3:00 p.m.

The “typical” visit to CLNP was described as a day trip, about six to eight hours in length, with about one hour spent in Rim Village. About 10 percent to 15 percent of summer visitors stay overnight in the Park; there are no overnight stays in the Park during the winter. Most summer visitors enter from one end of the Park and leave at the other end (through-trip) without traveling all the way around Rim Drive; all winter visitors enter and exit from the south end of the Park.

The NPS, through a concession contract, provides visitor services and facilities at several locations in CLNP. Rim Village is the year-round focal point for park visitors. Visitors have access to a visitor center, cafeteria, restaurant, gift store, picnic area, comfort station, and the Crater Lake Lodge. Only the cafeteria and gift store remain open during the winter. Rim Village is also the primary staging area for hiking trails, and is the location of an employee dormitory. Cross-country ski rental used to be offered at Rim Village, but was discontinued several years ago due to low demand.

Mazama Village is a second major visitor focal point during summer months. At this location, visitors have access to a campground, camper store, trailheads, and Mazama Village Motor Inn. A new employee dormitory is also located at Mazama.

Figure 2. Attraction Areas within Crater Lake National Park



The Cleetwood area provides visitors the only direct access to the shoreline of Crater Lake. It is the staging area for a one and three-quarter hour boat tour that is operated by the concessionaire. The boat tour is operated nine times per day, during summer only,

with four 48-passenger boats. The boat tour also provides the only access to Wizard Island. About five percent of CLNP visitors take a boat tour.

Munson Valley houses the administrative headquarters for CLNP. The Steel Information Center is also located at Munson Valley. This information center, which is opened year-round, has visitor information, a post office, bookstore, and restrooms.

Crater Lake Lodge and Mazama Village Motor Inn are popular lodging destinations. They are typically filled every night during summer months, and reservations are frequently made months in advance. The two campgrounds in CLNP are typically filled to 90 percent of capacity. The Lodge, Motor Inn, and campgrounds are all closed from mid-October to mid-May.

CLNP charges fees for both park entry and facility usage. Park entry fees are \$5.00 for bicyclists and walkers, \$10 for cars and motor homes, and \$25 to \$200 for commercial buses. Camping fees vary between \$13 and \$15 per site. Boat tours cost \$18.25 per adult and \$10.50 per child.

A new Visitor Service Plan (VSP) was approved for CLNP in 1998. The new VSP did not include many proposals from earlier years that would have greatly expanded visitor facilities and transportation services in the Rim Village area. The proposed strategy in the VSP was for enhanced interpretive features and upgrades or modifications of visitor facilities, including:

- Removal of parking along the rim edge at Rim Village;
- Redesign of parking and roadway alignments at Rim Village to benefit pedestrian movements and reduce conflict points;
- Addition of a deli-style food service at Rim Village;
- Relocation of the restaurant and some retail activities from Rim Village to Mazama Village; and
- Reduction in the number of boat tours offered at Cleetwood to reduce parking demand related to overlapping schedules.

■ 2.0 Existing ATS

Visitors have access to commercial airline flights, intercity bus, and rental cars in Medford. Visitors also have access to intercity bus and Amtrak rail service in Klamath Falls. Privately run bus tours from Seattle, Portland, and Medford operate through the Park during the summer. These bus tours, which are popular with elderly and international visitors, pass through the Park about two to three times per week.

There is not currently any transit service to or within the Park. However, there have been many attempts through the years at operating shuttle services. During the 1970s, a concessionaire ran a stage line to CLNP from Klamath Falls. Another concessionaire operated

a tour service along the rim during the 1970s and 1980s. However, both of these services ended due to high costs and lack of interest from park visitors.

Bicycling is a very popular activity at CLNP during summer months. Many large bicycling groups visit the Park throughout the summer months. Currently, individual bicyclists and groups use Rim Drive and other park roads to travel through CLNP. There are no dedicated bicycle facilities in the Park.

While Rim Drive is a popular visitor excursion, traffic congestion is generally not a problem. However, Rim Drive is relatively narrow, so the popularity of bicycling at CLNP leads to conflicts between bicycles and vehicles.

Congestion can be more of a problem at the parking areas for Cleetwood and Rim Village during peak visitation times. These parking problems were a major issue during preparation of the VSP. The parking problem is worse at Cleetwood, where vehicles are frequently forced to park along the shoulders of Rim Drive; this spillover parking can lead to periodic congestion in the area. Parking was described as a very prominent feature at Rim Village. Due to the layout of the buildings, parking areas, and circulation roads, conflicts between pedestrians and vehicles are quite common during peak visitation times. Implementation of the VSP will result in removal of some parking from Rim Village due to dispersal of facilities.

The concessionaire runs a boat tour of Crater Lake from the Cleetwood area. The boat tour runs in a loop pattern, with one stop at Wizard Island. Other stops are not made along the shoreline and are not feasible due to very steep slopes along the shore that are 500 feet to 2,000 feet high in most places.

■ 3.0 ATS Needs

Several Alternative Transportation Systems (ATS) services have been tested at CLNP, and many of these services have lasted for several years. Nonetheless, all of these services ended due to high cost and lack of demand, and park officials concede there is “no pressing need for ATS.” At this time, it appears that strongest interest exists for adding bicycle facilities and, hence, facilitating bicycle travel as an ATS. For a variety of reasons, however, no specific bicycling proposal has gained enough support to be given serious consideration.

CLNP staff suggested that the most feasible ATS proposal, at this time, involves a “snow coach” shuttle service between Mazama Village and Rim Village during winter months. This shuttle would allow CLNP to save costs associated with plowing snow on the road between Mazama Village and the rim. With lower visitation during winter months, a snow coach would be able to run less frequently than a summertime shuttle. Also, during winter months, all visitors enter the Park through the west or south entrance and travel to Mazama Village. Therefore, current travel patterns support intercepting visitors at Mazama Village and shuttling them to the rim.

■ 4.0 Basis of ATS Needs

In 1988, a detailed study was undertaken to evaluate various ATS options at CLNP. This ATS was intended to provide access to a proposed hotel/activity center at Rim Village. At the time, the intent was to remove as much parking as possible from Rim Village. That parking would be replaced with a remote lot located below the rim, with visitors shuttled between the remote lot and Rim Village. The detailed study considered aerial gondola, funicular railway, and multiple shuttle bus options. Each option had a different combination of rim/remote parking, as well as options for demand-responsive service during the evening and night hours.

In the end, strong opposition arose for the concepts considered in the 1988 study. Reasons for the opposition included a perceived lack of a strong need, high capital, and operating costs for the shuttle service, and the high cost of providing parking structures as proposed in the study.

Due to the popularity of bicycling and frequent bicycle/vehicle interaction on Rim Drive, interest has been expressed in development of a dedicated bicycle lane and/or path along the Rim. However, there is difficulty in fitting a new bicycle facility within the existing right-of-way of Rim Drive. CLNP staff indicated that strong opposition arose when discussions of a bicycle facility on new alignment were raised.

Limited interest continues to be expressed in restarting some type of shuttle service along the east side of the rim between Rim Village and Cleetwood. It has been suggested that this service could also shuttle bicycles and riders between the areas. A more ambitious suggestion involves closing the east side of the rim to vehicular traffic and converting the two-lane roadway into a one-way bus lane and two-way bicycle lane. Busses would be environmentally-friendly, running on propane or another alternative fuel. Private vehicles would still be permitted to drive through the park along the west side of the rim, using both the north and south entrances. CLNP staff expects that alternate access and circulation modes will be a major interest during preparation of a new General Management Plan that has been underway since 2000. Implementation of potential shuttle service is complicated by the very short tourist season, and the tendency for many visitors to travel through the Park rather than beginning and ending their trip at the same location. However, if the east rim closure mentioned above were implemented, the need for ATS would be clearly established.

■ 5.0 Documents Reviewed

Visitor Services Plan/Environmental Impact Statement. Crater Lake National Park, 1998.

Crater Lake Transportation Study – 100 Percent Report – Draft. National Park Service, August 1989.

■ 6.0 Persons Interviewed

John Miele, Management Associate, Crater Lake National Park, January 9, 2001.